AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

1. (currently amended) Human $\beta$TrCP protein (h- $\beta$TrCP) for the targeting of proteins towards proteasome degradation pathways, said protein having SEQ ID NO:2 and being capable of interacting with proteins degradable by proteasome, which possess the phosphorylation unit comprising the amino acids Asp-Ser-Glu-Xaa-Xaa-Ser (SEQ ID NO:9), in which Xaa is any natural amino acid and the serine residues are phosphorylated and said protein comprising the following units having the following positions in the sequence SEQ ID NO:2:

| | |
|---|---|
| -F-box: | amino acids 147 - 191, |
| -first WD unit: | amino acids 259 - 292, |
| -second WD unit: | amino acids 304 - 332, |
| -third WD unit: | amino acids 343 - 373, |
| -fourth WD unit: | amino acids 387 - 415, |
| -fifth WD unit: | amino acids 427 - 455, |
| -sixth WD unit: | amino acids 467 - 492, and |
| -seventh WD unit: | amino acids 516 - 544. |

2. (canceled)

3. (previously presented) Protein according to Claim 1, characterized in that it is capable of interacting with the Vpu protein of HIV-1 virus or with the cell proteins I$\kappa\beta$ or $\beta$-Catenin.

4. (previously presented) Protein according to claim 1, characterized in that it is capable of interacting with the Skp1p protein.

5 - 6. (canceled)

7. (currently amended) A nucleic acid sequence coding for the human protein h-$\beta$TrCP according to Claim 1, characterized in that it consists of:

a) the DNA sequence SEQ ID ~~No. 1~~ NO:1;

~~b) a DNA sequence which hybridizes under strict conditions with the above sequence;~~

~~c)~~ b) A DNA sequence which, due to the degeneracy of the genetic code, results from the sequences a) ~~and b)~~ above and codes for the human protein h-$\beta$TrCP having SEQ ID NO:2; or

~~d)~~ c) a mRNA and cDNA sequence corresponding to a), ~~b),~~ or ~~c)~~ b).

8 - 30. (canceled)

31. (original) Expression vector, characterized in that it comprises a nucleic acid sequence according to claim 7 and the means necessary for its expression.

32. (original) Microorganisms or host cells transformed by an expression vector according to claim 31.

33 - 36. (canceled)

37. (previously presented) A method of identifying anti-HIV-1 antiviral agents, the method comprising the step of screening anti-HIV antiviral agent candidates using the h-$\beta$TrCP protein of Claim 1 to determine the capability of the anti-HIV antiviral agent candidates to inhibit the interaction between h-$\beta$TrCP protein and Vpu protein, wherein an anti-HIV antiviral agent candidate that inhibits binding between h-$\beta$TrCP protein and Vpu protein is identified as an anti-HIV-1 antiviral agent.

38 - 50. (canceled)